ENVIRONMENTAL PROTECTION COMMISSION[567]

Notice of Intended Action

Proposing rule making related to five-year review of rules and providing an opportunity for public comment

The Environmental Protection Commission (Commission) hereby proposes to amend Chapter 100, "Scope of Title—Definitions—Forms—Rules of Practice," and Chapter 102, "Permits"; to rescind Chapter 104, "Sanitary Disposal Projects with Processing Facilities"; and to amend Chapter 114, "Sanitary Landfills: Construction and Demolition Wastes," Chapter 115, "Sanitary Landfills: Industrial Monofills," and Chapter 120, "Landfarming of Petroleum Contaminated Soil," Iowa Administrative Code.

Legal Authority for Rule Making

This rule making is proposed under the authority provided in Iowa Code sections 455B.304, 455B.383 and 455D.7(1).

State or Federal Law Implemented

This rule making implements, in whole or in part, Iowa Code sections 455B.301A, 455B.304, 455B.307 and 455B.383 and chapter 455D.

Purpose and Summary

Chapters 100, 102, 104, 114, 115 and 120 regulate solid waste. This proposed rule making will reduce and consolidate these regulations. Specifically, the proposed rule making rescinds redundant or outdated rules, consistent with Iowa Code section 17A.7(2)'s five-year rule review directive. It also consolidates rules scattered across three chapters into one chapter. Chapter 104 in its entirety is proposed to be rescinded, and the requirements for solid waste incinerator operator certification are proposed to be moved to Chapter 102. This strategic streamlining will make all of the regulations more intuitive and easier to read and understand.

No new policy proposals are included in this proposed rule making.

Fiscal Impact

This rule making has no fiscal impact to the State of Iowa. A copy of the fiscal impact statement is available from the Department of Natural Resources (Department) upon request.

Jobs Impact

After analysis and review of this rule making, no impact on jobs has been found. A copy of the jobs impact statement is available from the Department upon request.

Waivers

Any person who believes that the application of the discretionary provisions of this rule making would result in hardship or injustice to that person may petition the Department for a waiver of the discretionary provisions, if any, pursuant to 561—Chapter 10.

Public Comment

Any interested person may submit written comments concerning this proposed rule making. Written comments in response to this rule making must be received by the Department no later than 4:30 p.m. on January 3, 2023. Comments should be directed to:

Theresa Stiner Iowa Department of Natural Resources Wallace State Office Building 502 East Ninth Street Des Moines, Iowa 50319

Email: theresa.stiner@dnr.iowa.gov

Public Hearing

A public hearing at which persons may present their views orally will be held via conference call as follows. Persons who wish to attend the conference call should contact Theresa Stiner via email. A conference call number will be provided prior to the hearing. Persons who wish to make oral comments at the conference call public hearing must submit a request to Ms. Stiner prior to the hearing to facilitate an orderly hearing

January 3, 2023 1:30 p.m.

Via video/conference call

Persons who wish to make oral comments at the public hearing will be asked to state their names for the record and to confine their remarks to the subject of this proposed rule making.

Any persons who intend to attend the hearing and have special requirements, such as those related to hearing impairments, should contact the Department and advise of specific needs.

Review by Administrative Rules Review Committee

The Administrative Rules Review Committee, a bipartisan legislative committee which oversees rule making by executive branch agencies, may, on its own motion or on written request by any individual or group, review this rule making at its regular monthly meeting or at a special meeting. The Committee's meetings are open to the public, and interested persons may be heard as provided in Iowa Code section 17A.8(6).

The following rule-making actions are proposed:

ITEM 1. Amend **567—Chapter 100**, title, as follows: SCOPE OF TITLE—DEFINITIONS—FORMS—RULES OF PRACTICE

ITEM 2. Amend rule 567—100.1(455B,455D) as follows:

567—100.1(455B,455D) Scope of title. The department has jurisdiction over the management, dumping, depositing, and disposal of solid waste by establishing standards for sanitary disposal projects and by regulating solid waste through a system of general rules and specific permits. The construction and operation of any sanitary disposal project requires a specific permit from the department.

This chapter provides general definitions applicable to this title and rules of practice, including forms, applicable to the public in the department's administration of the subject matter of this title <u>Title VIII</u> (solid waste management and disposal) of the commission's rules and general conditions of solid waste disposal.

Chapter 101 contains the general requirements relating to solid waste management and disposal. Chapter 102 pertains to the permits which must be obtained in order to construct and operate a sanitary disposal project. Chapter 103 details the requirements for all sanitary landfills accepting only coal combustion residue. Chapter 104 details the requirements for sanitary disposal projects with processing facilities. Chapter 105 sets forth the requirements for the planning and operation of all composting facilities. Chapter 106 pertains to design and operating requirements for recycling operations. Chapter 107 sets forth the rules pertaining to beverage container deposits and approval of redemption centers. Chapter 108 pertains to the reuse of solid waste. Chapter 109 contains the procedure for the assessment and collection of fees for the disposal of solid waste at sanitary landfills. Chapter 110 contains design,

construction, and operation standards for solid waste management facilities. Chapter 112 details the requirements for all sanitary landfills accepting only biosolids. Chapter 113 details the requirements for all sanitary landfills accepting municipal solid waste. Chapter 114 details the requirements for all sanitary landfills accepting only construction and demolition wastes. Chapter 115 details the requirements for all sanitary landfills that are industrial waste monofills. Chapter 117 details the requirements for outdoor storage and processing of waste tires. Chapter 118 governs removal and disposal of PCBs from white goods. Chapter 119 provides requirements for collection and disposal of waste oil. Title VIII, Chapters 120 and 121, govern land application of sludge and other solid waste.

This rule is intended to implement Iowa Code section 455B.304 and chapter 455D.

ITEM 3. Amend rule 567—100.2(455B,455D), definition of "Solid waste," as follows:

"Solid waste" has the same meaning as found in Iowa Code section 455B.301. Pursuant to Iowa Code section 455B.301(23)"b," 455B.301(29)"b," the commission has determined that solid waste includes those wastes exempted from federal hazardous waste regulation pursuant to 40 CFR 261.4(b) as amended through November 16, 2016, except to the extent that any such exempted substances are liquid wastes or wastewater. This definition applies to all chapters within Title VIII. To the extent that there is a conflict, this definition controls.

ITEM 4. Rescind the definitions of "Leachate," "Private agency," "Rubble" and "Sanitary landfill" in rule 567—100.2(455B,455D).

ITEM 5. Adopt the following <u>new</u> definitions of "Incorporation," "Landfarm," "Landfarm applicator," "Landfarming," "Landfarm plot," "Landfarm season," "Nonstandard PCS," "Petroleum contaminated soil," "Source of PCS," "Standard PCS," "Tar ball" and "Type of PCS" in rule **567—100.2(455B,455D)**:

"Incorporation" means to mix into the soil by tilling, disking, or other suitable means, thereby creating a loose and divided soil texture.

"Landfarm" means the area of land used to landfarm a single application of a particular source and type of PCS. Landfarms are created when a permitted landfarm applicator, or party under the applicator's supervision, applies PCS to the land. No other PCS may be applied within 15 feet of the area of land used as a landfarm until the landfarm is closed pursuant to rule 567—120.12(455B).

"Landfarm applicator" means an entity permitted by the department to apply PCS to the land to create one or more landfarms.

"Landfarming" means a surface-level soil remediation technology for petroleum contaminated soils that reduces concentrations of petroleum constituents through biodegradation to a level safe for human health and the environment. This technology usually involves spreading excavated contaminated soils in a thin layer on the ground surface and stimulating aerobic microbial activity within the soils through aeration. The enhanced microbial activity results in degradation of adsorbed petroleum product constituents through microbial respiration. Some petroleum product constituents volatize during the landfarming process.

"Landfarm plot" means the specific operating area of a landfarm upon which a particular source and type of PCS is applied.

"Landfarm season" means the period of the year when the ground is not frozen or snow-covered and runoff from these situations is not expected to transport PCS beyond the landfarm area.

"Nonstandard PCS" means soil contaminated with a petroleum product other than gasoline, diesel fuel, kerosene, jet fuel, motor oil, hydraulic fluid, or some combination thereof.

"Petroleum contaminated soil" or "PCS" means soil contaminated with petroleum products including, but not limited to, gasoline, diesel fuel, kerosene, jet fuel, motor oil, hydraulic fluid, or some combination thereof.

"Source of PCS" means the contaminated area from which the PCS originated. Examples of a source include, but are not limited to, a specific gas station or spill location.

"Standard PCS" means soil contaminated with gasoline, diesel fuel, kerosene, jet fuel, motor oil, hydraulic fluid, or some combination thereof.

"Tar ball" means a ball or conglomeration of tarlike petroleum constituents. Tar balls may form when PCS that contains a high concentration of long-chain or high molecular weight hydrocarbons is landfarmed.

"Type of PCS" means the specific petroleum product or combination thereof that contaminated the soil. Examples of type include, but are not limited to, gasoline, diesel fuel, kerosene, jet fuel, motor oil, hydraulic fluid, or some combination thereof.

- ITEM 6. Rescind and reserve rule **567—100.3(17A,455B)**.
- ITEM 7. Rescind and reserve rule 567—100.5(455B).
- ITEM 8. Amend **567—Chapter 102**, title, as follows:

PERMITS AND RULES OF PRACTICE

- ITEM 9. Amend paragraph 102.2(1)"a" as follows:
- a. Applications for renewal to be timely filed must be received at the department's office at least 90 days before the expiration date of the existing permit. For application forms, see 567—100.3(17A,455B) on a form provided by the department.
 - ITEM 10. Amend subrule 102.3(1) as follows:
- **102.3(1)** Application requirements for permits and renewals. See 567—100.3(17A,455B) More information can be found in subrule 102.2(1).
 - ITEM 11. Adopt the following **new** rule 567—102.15(455B):
- **567—102.15(455B) Solid waste incinerator operator certification.** Solid waste incinerator operators shall be trained, tested, and certified by a department-approved certification program.
- **102.15(1)** A solid waste incinerator operator shall be on duty during all hours of operation of a solid waste incinerator, consistent with the respective certification.
- 102.15(2) To become a certified operator, an individual shall complete a basic operator training course that has been approved by the department or alternative, equivalent training approved by the department and shall pass a departmental examination as specified by this rule. An operator certified by another state may have reciprocity subject to approval by the department.
- **102.15(3)** A solid waste incinerator operator certification is valid from the date of issuance until June 30 of the following even-numbered year.
- **102.15(4)** Basic operator training course. The required basic operator training course for a certified solid waste incinerator operator shall have at least 12 contact hours and shall address the following areas, at a minimum:
 - a. Description of types of wastes;
 - b. Incinerator design;
 - c. Interpreting and using engineering plans;
 - d. Incinerator operations;
 - e. Environmental monitoring;
 - f. Applicable laws and regulations;
 - g. Permitting processes;
 - h. Incinerator maintenance; and
 - *i*. Ash and residue disposal.
- **102.15(5)** Alternative basic operator training must be approved by the department. It shall be the applicant's responsibility to submit any documentation the department may require to evaluate the equivalency of alternative training.

102.15(6) Fees.

- a. The examination fee for each examination is \$20.
- b. The initial certification fee is \$8 for each one-half year of a two-year period from the date of issuance to June 30 of the next even-numbered year.
 - c. The certification renewal fee is \$24.
 - d. The penalty fee is \$12.

102.15(7) Examinations.

- a. The operator certification examinations will be based on the basic operator training course curriculum.
- b. All persons wishing to take the examination required to become a certified operator of a solid waste incinerator shall complete the Operator Certification Examination Application, Form 542-1354. A listing of dates and locations of examinations is available from the department upon request. The application form requires the applicant to indicate the basic operator training course taken. Evidence of training course completion must be submitted with the application for certification. The completed application and the application fee shall be sent to the Department of Natural Resources, 502 East 9th Street, Des Moines, Iowa 50319. Application for examination must be received by the department at least 30 days prior to the date of examination.
- c. A properly completed application for examination shall be valid for one year from the date the application is approved by the department.
- d. Upon failure of the first examination, the applicant may be reexamined at the next scheduled examination. Upon failure of the second examination, the applicant shall be required to wait a period of 180 days before taking a subsequent examination.
- e. Upon each reexamination when a valid application is on file, the applicant shall submit to the department the examination fee at least ten days prior to the date of examination.
- f. Failure to successfully complete the examination within one year from the date of approval of the application shall invalidate the application.
- g. Completed examinations will be retained by the department for a period of one year, after which they will be destroyed.
 - h. Oral examinations may be given at the discretion of the department.

102.15(8) Certification.

- a. All operators who passed the operator certification examination by July 1, 1991, are exempt from taking the required operator training course. Beginning July 1, 1991, all operators will be required to take the basic operator training course and pass the examination in order to become certified.
- b. Application for certification must be received by the department within 30 days of the date the applicant receives notification of successful completion of the examination. All applications for certification shall be made on a form provided by the department and shall be accompanied by the certification fee.
- c. Applications for certification by examination that are received more than 30 days but less than 60 days after notification of successful completion of the examination shall be accompanied by the certification fee and the penalty fee. Applicants who do not apply for certification within 60 days of notice of successful completion of the examination will not be certified on the basis of that examination.
- d. For applicants who have been certified under other state mandatory certification programs, the equivalency of which has been previously reviewed and accepted by the department, certification without examination will be recommended.
- e. For applicants who have been certified under voluntary certification programs in other states, certification will be considered. The applicant must have successfully completed a basic operator training course and an examination generally equivalent to the Iowa examination. The department may require the applicant to successfully complete the Iowa examination.
- f. Applicants who seek Iowa certification pursuant to paragraph 102.15(8) "d" or 102.15(8) "e" shall submit an application for examination accompanied by a letter requesting certification pursuant to this subrule. Application for certification pursuant to this subrule shall be received by the department in accordance with paragraphs 102.15(8) "b" and "c."
- 102.15(9) All certificates shall expire every two years, on even-numbered years, and must be renewed every two years to maintain certification. The renewal application and fee are due prior to expiration of certification.
- a. Late application for renewal of a certificate may be made provided that such late application shall be received by the department or postmarked within 30 days of the expiration of the certificate.

Such late application shall be on forms provided by the department and accompanied by the penalty fee and the certification renewal fee.

- b. If a certificate holder fails to apply for renewal within 30 days following expiration of the certificate, the right to renew the certificate automatically terminates. Certification may be allowed at any time following such termination, provided that the applicant successfully completes an examination. The applicant must then apply for certification in accordance with subrule 102.15(8).
- c. An operator shall not continue to operate a solid waste incinerator after expiration of a certificate without renewal thereof.
- d. Continuing education credits must be earned during the two-year certification period. All certified operators must earn ten contact hours per certificate during each two-year period. The two-year period will begin upon certification.
- e. Only those operators fulfilling the continuing education requirements before the end of each two-year period will be allowed to renew their certificates. The certificates of operators not fulfilling the continuing education requirements shall be void upon expiration, unless an extension is granted.
- f. All activities for which continuing education credit will be granted must be related to the subject matter of the particular certificate to which the credit is being applied.
- g. The department may, in individual cases involving hardship or extenuating circumstances, grant an extension of time of up to three months within which the applicant may fulfill the minimum continuing education requirements. Hardship or extenuating circumstances include documented health-related confinement or other circumstances beyond the control of the certified operator that prevent attendance at the required activities. All requests for extensions must be made 60 days prior to expiration of certification.
- h. The certified operator is responsible for notifying the department of the continuing education credits earned during the period. The continuing education credits earned during the period shall be shown on the application for renewal.
- i. A certified operator shall be deemed to have complied with the continuing education requirements of this rule during periods that the operator serves honorably on active duty in the military service; or during periods that the operator is a resident of another state or district having a continuing education requirement for operators and meets all the requirements of that state or district for practice there; or during periods that the person is a government employee working as an operator and is assigned to duty outside of the United States; or during other periods of active practice and absence from the state approved by the department.

102.15(10) Discipline of certified operators.

- a. Disciplinary action may be taken on any of the following grounds:
- (1) Failure to use reasonable care or judgment or to apply knowledge or ability in performing the duties of a certified operator. Duties of certified operators include compliance with rules and permit conditions applicable to incinerator operation.
- (2) Failure to submit required records of operation or other reports required under applicable permits or rules of the department, including failure to submit complete records or reports.
- (3) Knowingly making any false statement, representation, or certification on any application, record, report, or document required to be maintained or submitted under any applicable permit or rule of the department.
 - b. Disciplinary sanctions allowable are as follows:
 - (1) Revocation of a certificate.
- (2) Probation under specified conditions relevant to the specific grounds for disciplinary action. Additional education or training or reexamination may be required as a condition of probation.
 - c. The procedure for discipline is as follows:
- (1) The department shall initiate disciplinary action. The commission may direct that the department investigate any alleged factual situation that may be grounds for disciplinary action under paragraph 102.15(10) "a" and report the results of the investigation to the commission.
 - (2) A disciplinary action may be prosecuted by the department.

- (3) Written notice shall be given to an operator against whom disciplinary action is being considered. The notice shall state the informal and formal procedures available for determining the matter. The operator shall be given 20 days to present any relevant facts and indicate the operator's position in the matter and to indicate whether informal resolution of the matter may be reached.
- (4) An operator who receives notice shall communicate verbally, in writing, or in person with the department, and efforts shall be made to clarify the respective positions of the operator and department.
- (5) The applicant's failure to communicate facts and positions relevant to the matter by the required date may be considered when appropriate disciplinary action is determined.
- (6) If agreement as to appropriate disciplinary sanction, if any, can be reached with the operator and the commission concurs, a written stipulation and settlement between the department and the operator shall be entered into. The stipulation and settlement shall recite the basic facts and violations alleged, any facts brought forth by the operator, and the reasons for the particular sanctions imposed.
- (7) If an agreement as to appropriate disciplinary action, if any, cannot be reached, the department may initiate formal hearing procedures. Notice and formal hearing shall be in accordance with 561—Chapter 7 related to contested and certain other cases pertaining to licensee discipline.
- **102.15(11)** Upon revocation of a certificate, application for certification may be allowed after two years from the date of revocation. Any such applicant must successfully complete an examination and be certified in the same manner as a new applicant.
- **102.15(12)** A temporary operator of a solid waste incinerator may be designated for a period of six months when an existing certified operator is no longer available to the facility. The facility must make application to the department, explain why a temporary certification is needed, identify the temporary operator, and identify the efforts that will be made to obtain a certified operator. A temporary operator designation shall not be approved for greater than a six-month period except for extenuating circumstances. In any event, not more than one six-month extension to the temporary operator designation may be granted. Approval of a temporary operator designation may be rescinded for cause as set forth in subrule 102.15(10).

This rule is intended to implement Iowa Code section 455B.304(12).

ITEM 12. Adopt the following **new** rule 567—102.16(455B):

- **567—102.16(455B) Disruption and excavation of sanitary landfills or closed dumps.** No person shall excavate, disrupt, or remove any deposited material from any active or discontinued sanitary landfill or closed dump without first having notified the department in writing.
- **102.16(1)** Notification shall include an operational plan stating the area involved, lines and grades defining limits of excavation, estimated number of cubic yards of material to be excavated, sanitary disposal project where material is to be disposed, and estimated time required for excavation procedures.
- 102.16(2) An excavation shall be confined to an area consistent with the number of pieces of digging equipment and trucks used for haulage.
- **102.16(3)** The disposal of all solid waste resulting from excavation shall be in conformity with Iowa Code chapter 455B and applicable solid or hazardous waste regulations.

This rule is intended to implement Iowa Code section 455B.304.

- ITEM 13. Adopt the following **new** implementation sentence in 567—Chapter 102:
- These rules are intended to implement Iowa Code sections 455B.304 and 455B.305.
- ITEM 14. Rescind and reserve 567—Chapter 104.
- ITEM 15. Amend paragraph 114.3(1)"a" as follows:
- a. Applications for renewal shall be received at the department office at least 90 days before the expiration date of the existing permit. For application forms, see 567 100.3(17A,455B) on a form provided by the department.
 - ITEM 16. Amend subrule 114.4(1) as follows:
- **114.4(1)** Application requirements for permits and renewals. See 567—100.3(17A,455B) More information can be found in 567—subrule 102.2(1).

- ITEM 17. Amend rule 567—114.29(455B), introductory paragraph, as follows:
- **567—114.29(455B) Operator certification.** Sanitary landfill operators and solid waste incinerator operators shall be trained, tested, and certified by a department-approved certification program.
 - ITEM 18. Amend subrule 114.29(1) as follows:
- 114.29(1) A sanitary landfill operator or a solid waste incinerator operator shall be on duty during all hours of operation of a sanitary landfill or solid waste incinerator, consistent with the respective certification.
 - ITEM 19. Amend subrules 114.29(3) and 114.29(4) as follows:
- 114.29(3) A sanitary landfill operator certification or solid waste incinerator operator certification is valid until June 30 of the following even-numbered year.
 - 114.29(4) Basic operator training course.
- *a*. The required basic operator training course for a certified sanitary landfill operator will have at least 25 contact hours and will address the following areas, at a minimum:
 - (1) a. Description of types of wastes;
 - (2) b. Interpreting and using engineering plans;
 - (3) c. Construction surveying techniques;
 - (4) d. Waste decomposition processes;
 - (5) e. Geology and hydrology;
 - (6) f. Landfill design;
 - (7) g. Landfill operation;
 - (8) h. Environmental monitoring;
 - (9) i. Applicable laws and regulations;
 - (10) *j*. Permitting processes;
 - (11) k. Leachate control and treatment.
- b. The required basic operator training course for a certified solid waste incinerator operator will have at least 12 contact hours and will address the following areas, at a minimum:
 - (1) Description of types of wastes;
 - (2) Incinerator design;
 - (3) Interpreting and using engineering plans;
 - (4) Incinerator operations;
 - (5) Environmental monitoring;
 - (6) Applicable laws and regulations;
 - (7) Permitting processes;
 - (8) Incinerator maintenance;
 - (9) Ash and residue disposal.

ITEM 20. Amend paragraph 114.29(7)"b" as follows:

- b. All persons wishing to take the examination required to become a certified operator of a sanitary landfill or a solid waste incinerator shall complete the Operator Certification Examination Application, Form 542-1354. A listing of dates and locations of examinations is available from the department upon request. The application form requires the applicant to indicate the basic operator training course taken. Evidence of training course completion must be submitted with the application for certification. The completed application and the application fee shall be sent to the director and addressed to the central office in Des Moines. Application for examination must be received by the department at least 30 days prior to the date of examination.
 - ITEM 21. Amend paragraph 114.29(9)"c" as follows:
- c. An operator may not continue to operate a sanitary landfill or solid waste incinerator after expiration of a certificate without renewal thereof.

- ITEM 22. Amend subparagraph 114.29(10)"a"(1) as follows:
- (1) Failure to use reasonable care or judgment or to apply knowledge or ability in performing the duties of a certified operator. Duties of certified operators include compliance with rules and permit conditions applicable to sanitary landfill or incinerator operation.
 - ITEM 23. Amend subrule 114.29(12) as follows:
- 114.29(12) A temporary operator of a sanitary landfill or solid waste incinerator may be designated for a period of six months when an existing certified operator is no longer available to the facility. The facility must make application to the department, explain why a temporary certification is needed, identify the temporary operator, and identify the efforts which will be made to obtain a certified operator. A temporary operator designation shall not be approved for greater than a six-month period except for extenuating circumstances. In any event, not more than one six-month extension to the temporary operator designation may be granted. Approval of a temporary operator designation may be rescinded for cause as set forth in 114.29(10).
 - ITEM 24. Amend paragraph 115.3(1)"a" as follows:
- a. Applications for renewal must be received at the department office at least 90 days before the expiration date of the existing permit. For application forms, see 567—100.3(17A,455B) on a form provided by the department.
 - ITEM 25. Amend subrule 115.4(1) as follows:
- 115.4(1) Application requirements for permits and renewals. See 567-100.3(17A,455B) More information can be found in 567—subrule 102.2(1).
 - ITEM 26. Amend rule 567—115.29(455B), introductory paragraph, as follows:
- **567—115.29(455B) Operator certification.** Sanitary landfill operators and solid waste incinerator operators shall be trained, tested, and certified by a department-approved certification program.
 - ITEM 27. Amend subrule 115.29(1) as follows:
- 115.29(1) A sanitary landfill operator or a solid waste incinerator operator shall be on duty during all hours of operation of a sanitary landfill or solid waste incinerator, consistent with the respective certification.
 - ITEM 28. Amend subrules 115.29(3) and 115.29(4) as follows:
- 115.29(3) A sanitary landfill operator certification or solid waste incinerator operator certification is valid until June 30 of the following even-numbered year.
 - 115.29(4) Basic operator training course.
- *a*: The required basic operator training course for a certified sanitary landfill operator will have at least 25 contact hours and will address the following areas, at a minimum:
 - (1) a. Description of types of wastes;
 - (2) b. Interpreting and using engineering plans;
 - (3) c. Construction surveying techniques;
 - (4) d. Waste decomposition processes;
 - (5) e. Geology and hydrology;
 - (6) f. Landfill design;
 - (7) g. Landfill operation;
 - (8) h. Environmental monitoring;
 - (9) i. Applicable laws and regulations;
 - (10) j. Permitting processes;
 - (11) k. Leachate control and treatment;
- b. The required basic operator training course for a certified solid waste incinerator operator will have at least 12 contact hours and will address the following areas, at a minimum:
 - (1) Description of types of wastes;
 - (2) Incinerator design;
 - (3) Interpreting and using engineering plans;

- (4) Incinerator operations;
- (5) Environmental monitoring;
- (6) Applicable laws and regulations;
- (7) Permitting processes;
- (8) Incinerator maintenance;
- (9) Ash and residue disposal.

ITEM 29. Amend paragraph 115.29(7)"b" as follows:

b. All persons wishing to take the examination required to become a certified operator of a sanitary landfill or a solid waste incinerator shall complete the Operator Certification Examination Application, Form 542-1354. A listing of dates and locations of examinations is available from the department upon request. The application form requires the applicant to indicate the basic operator training course taken. Evidence of training course completion must be submitted with the application for certification. The completed application and the application fee shall be sent to the director and addressed to the central office in Des Moines. Application for examination must be received by the department at least 30 days prior to the date of examination.

ITEM 30. Amend subparagraph 115.29(10)"a"(1) as follows:

(1) Failure to use reasonable care or judgment or to apply knowledge or ability in performing the duties of a certified operator. Duties of certified operators include compliance with rules and permit conditions applicable to sanitary landfill or incinerator operation.

ITEM 31. Amend subrule 115.29(12) as follows:

115.29(12) A temporary operator of a sanitary landfill or solid waste incinerator may be designated for a period of six months when an existing certified operator is no longer available to the facility. The facility must make application to the department, explain why a temporary certification is needed, identify who the temporary operator will be, and identify the efforts which will be made to obtain a certified operator. A temporary operator designation shall not be approved for greater than a six-month period except for extenuating circumstances. In any event, not more than one six-month extension to the temporary operator designation may be granted. Approval of a temporary operator designation may be rescinded for cause as set forth in 115.29(10).

ITEM 32. Adopt the following **new** subrule 120.2(4):

120.2(4) These rules do not apply to hazardous waste.

ITEM 33. Amend rule 567—120.3(455B) as follows:

567—120.3(455B) Definitions. In addition to the <u>The</u> definitions set out in Iowa Code section 455B.301, which shall be considered to be incorporated by reference in these rules, the following definitions shall apply: For the purposes of this chapter, the definitions found in 567—Chapter 100 shall apply.

"High water table" means the position of the water table that occurs in the spring in years of normal or above-normal precipitation.

"Incorporation" means to mix into the soil by tilling, disking, or other suitable means, thereby ereating a loose and divided soil texture.

"Landfarm" means a surface level soil remediation technology for petroleum contaminated soils that reduces concentrations of petroleum constituents through biodegradation to a level safe for human health and the environment. This technology usually involves spreading excavated contaminated soils in a thin layer on the ground surface and stimulating aerobic microbial activity within the soils through aeration. The enhanced microbial activity results in degradation of adsorbed petroleum product constituents through microbial respiration. Some petroleum product constituents volatize during the landfarming process. There are two types of landfarm permits issued by the department: a multiuse landfarm permit and a single-use landfarm applicator permit.

"Landfarm plot" means the specific operating area of a landfarm upon which a particular source and type of PCS is applied. A landfarm plot is a subset of the operating area.

"Landfarm season" means the time period beginning April 1 and ending October 31 of each year.

"Multiuse landfarm" means a landfarm used for more than one application of PCS. Each application of a particular source and type of PCS is landfarmed in separate landfarm plots. After the PCS is remediated, the landfarming process may be repeated. A multiuse landfarm is not located at a sanitary landfill.

"Nonstandard PCS" means soil contaminated with a petroleum product other than gasoline, diesel fuel, kerosene, jet fuel, motor oil, hydraulic fluid, or some combination thereof.

"Operating area" means the total aggregate area of the landfarm where PCS is applied. The operating area of a multiuse landfarm may include multiple landfarm plots.

"Petroleum contaminated soil" or "PCS" means soil contaminated with petroleum products including, but not limited to, gasoline, diesel fuel, kerosene, jet fuel, motor oil, hydraulic fluid, or some combination thereof.

"Single-use landfarm" means the area of land used to landfarm a single application of a particular source and type of PCS. Single-use landfarms are created when a single-use landfarm applicator, or the landfarm's supervised agent, land applies PCS. No other PCS may be applied within 15 feet of the area of land used as a single-use landfarm until the single-use landfarm is closed pursuant to rule 567—120.12(455B).

"Single-use landfarm applicator" means an entity permitted by the department to land apply PCS to create one or more single-use landfarms.

"Source of PCS" means the contaminated area from which the PCS originated. Examples of a source include, but are not limited to, a specific gas station or spill location.

"Standard PCS" means soil contaminated with gasoline, diesel fuel, kerosene, jet fuel, motor oil, hydraulic fluid, or some combination thereof.

"Tar ball" means a ball or conglomeration of tarlike petroleum constituents. Tar balls may form when PCS that contains a high concentration of long-chain or high molecular weight hydrocarbons is landfarmed.

"Type of PCS" means the specific petroleum product or combination thereof that contaminated the soil. Examples of type include, but are not limited to, gasoline, diesel fuel, kerosene, jet fuel, motor oil, hydraulic fluid, or some combination thereof.

"Water table" means the water surface below the ground at which the unsaturated zone ends and the saturated zone begins.

ITEM 34. Amend rule 567—120.4(455B) as follows:

567—120.4(455B) Landfarming applicator permits.

120.4(1) *Permit required.* PCS shall not be landfarmed without a <u>landfarm applicator</u> permit from the department.

120.4(2) Types of landfarm permits <u>Landfarm applicator permit</u>. The department issues two types of landfarm permits as follows:

- a. Multiuse landfarm permit. A multiuse landfarm permit is issued for a landfarm designed to be used for more than one application of PCS. This permit requires that each application of a particular source and type of PCS be landfarmed in separate landfarm plots. If a facility has a multiuse landfarm permit, then the landfarming process may be repeated after the PCS has been remediated. A multiuse landfarm permit is not for a facility located at a sanitary landfill.
- b. Single-use landfarm applicator permit. A single-use Upon issuance of a landfarm applicator permit is issued to an entity that is then_permitted by the department to land, the permit holder is authorized to apply PCS to the land to create one or more single-use landfarms. This permit requires that single-use landfarms be used for only one application of a particular source and type of PCS. This permit requires that no other PCS be applied within 15 feet of the area of land used as a single-use landfarm until the single-use landfarm is closed pursuant to rule 567—120.12(455B).
- **120.4(3)** Construction and operation. All landfarms Landfarms shall be constructed and operated according to these rules, any plans and specifications approved by the department, and the conditions of the permit. Any approved plans and specifications shall constitute a condition of the permit.

- **120.4(4)** Transfer of title and permit. If title to a type of landfarm applicator permit is transferred to a third party, then the department shall transfer the permit within 60 days if the department has determined that the following requirements have been met:
 - a. No change.
- b. The permitted <u>facility</u> <u>applicator</u> and title transferee are in compliance with Iowa Code chapter 455B, this chapter and the conditions of the permit.
 - 120.4(5) No change.
- **120.4(6)** Effect of revocation. If a landfarm <u>applicator</u> permit held by any public or private agency is revoked by the department, then no new landfarm <u>applicator</u> permit shall be issued to that agency for a <u>period minimum</u> of one year from the date <u>of revocation</u> the facility was brought into full compliance with the <u>revocation order</u>. Such revocation shall not prohibit the issuance of a permit for the same landfarm project to another <u>public or private agency landfarm application permit holder</u>.
- 120.4(7) Inspection of site and operation. The By obtaining an applicator permit, the permitted entity agrees that the department may inspect the facility and its operations at reasonable times to determine if the landfarm is in compliance with this chapter and the permit requirements.
- **120.4(8)** *Duration of permits*. Landfarm <u>applicator</u> permits shall be issued and may be renewed for a three-year term.
 - 120.4(9) to 120.4(11) No change.
 - ITEM 35. Rescind subrule **120.5(1)**.
 - ITEM 36. Renumber subrules 120.5(2) and 120.5(3) as 120.5(1) and 120.5(2).
 - ITEM 37. Amend renumbered subrule 120.5(1) as follows:
- **120.5(1)** Single-use landfarm Landfarm applicator permits. To apply for a single-use landfarm applicator permit, the applicant shall submit the following information to the department:
 - a. The name, address, and telephone number of:
 - (1) Agency applying for the single-use landfarm applicator permit.
 - (2) to (4) No change.
 - b. to d. No change.
 - ITEM 38. Amend subrule 120.6(3) as follows:
- **120.6(3)** Tar balls. PCS that has the potential to produce tar balls shall not be landfarmed at a single-use or multiuse landfarm. Such PCS may be disposed of in a sanitary landfill pursuant to 567—Chapter 109.
 - ITEM 39. Amend subrule 120.7(1) as follows:
- 120.7(1) *Previous use.* If the <u>a</u> site is to be used as a single-use landfarm, then the single-use landfarm applicator shall obtain written confirmation from the site owner of one of the following requirements: This subrule shall not apply to land utilized as a landfarm prior to October 20, 2004.
- a. That any other landfarm created in the past three years within 15 feet of the proposed operating area landfarm plot has been closed pursuant to rule 567—120.12(455B).
- b. That no area within 15 feet of the proposed operating area landfarm plot has been used as a landfarm in the past three years.
 - ITEM 40. Amend subrule 120.7(2) as follows:
- **120.7(2)** Wells. PCS shall not be landfarmed or stored within 500 feet of a well that is being used or could be used for human or livestock consumption. Groundwater monitoring wells installed pursuant to paragraph 120.8(2) "c" are exempt from this requirement. The department may also exempt from this requirement extraction wells utilized as part of a remediation system. PCS shall not be landfarmed or stored within 500 feet of an agricultural drainage well.

- ITEM 41. Rescind subrule **120.7(4)**.
- ITEM 42. Renumber subrules 120.7(5) to 120.7(10) as 120.7(4) to 120.7(9).
- ITEM 43. Amend renumbered subrule 120.7(5) as follows:
- **120.7(5)** *Tile lines.* PCS shall not be landfarmed or stored within 200 feet of a tile line surface intake. A multiuse landfarm shall not be located on land that has been tiled. The absence of tile lines shall be verified by written confirmation from the landowner and a visual inspection of the property.
 - ITEM 44. Amend renumbered subrule 120.7(9) as follows:
- **120.7(9)** Soil properties for operating area <u>landfarm plot</u>. All soils in the operating area <u>landfarm</u> plot of the landfarm shall comply with the following requirements:
 - a. USDA textural soil classification.
- (1) Multiuse landfarms. Soils in the operating area of multiuse landfarms shall be silty clay, silt clay loam, clay loam, loam, or silt loam as classified by the USDA Textural Classification Chart for soils.
- (2) Single-use landfarms. Soils in the operating area landfarm plot of single-use landfarms shall be clay, sandy clay, sandy clay loam, sandy loam, silty clay, silt clay loam, clay loam, loam, or silt loam as classified by the USDA Textural Classification Chart for soils.
- b. Stones and debris. Soils in the operating area landfarm plot shall be free of stones and debris larger than 4 inches in diameter.
- c. Soil pH. Soils in the operating area landfarm plot shall have a pH greater than or equal to 6 and less than or equal to 9.
- d. Bedrock separation. The operating area landfarm plot shall have a minimum of 6 feet of soil over bedrock.
 - ITEM 45. Rescind and reserve subrule **120.8(2)**.
 - ITEM 46. Amend rule 567—120.9(455B), introductory paragraph, as follows:
- **567—120.9(455B)** Landfarm operating requirements. All multiuse and single-use landfarms shall comply with the following operating requirements:
 - ITEM 47. Amend subrules 120.9(2) to 120.9(5) as follows:
- **120.9(2)** Saturated, <u>or</u> slurry, <u>or flammable</u> PCS. PCS in a saturated, <u>or</u> slurry, <u>or flammable</u> condition shall not be <u>land</u> applied to the <u>land</u> or stored at a landfarm. PCS in such a condition shall be bulked with other biodegradable materials (e.g., compost, mulch) until it is no longer saturated, <u>or</u> in a slurry, <u>or flammable</u> before it is <u>land</u> applied to the land or stored at a landfarm.
- 120.9(3) PCS <u>delivery and storage</u>. Only PCS that is from an emergency cleanup may be delivered during the non-landfarm season. PCS delivered during non-landfarm season may be stored as follows until the conditions of subrule 120.9(4) are satisfied or within the first seven days of landfarm season, whichever is shorter. PCS that cannot immediately be <u>land</u> applied to the <u>land</u> at the landfarm during landfarm season may be stored at the landfarm as follows. PCS delivered during non-landfarm season may be stored until the conditions of subrule 120.9(4) are satisfied or within the first seven days of <u>landfarm season</u>, whichever is shorter.
- a. Seven days or less. PCS may be stored up to seven days in compliance with the following requirements:
 - (1) Over an impervious surface (e.g., tarp, concrete pad, plastic sheeting).
 - (2) Under a roof or tarp to minimize the infiltration of precipitation.
 - (3) In an area with minimal potential for stormwater run-on.
- b. Extended storage time. No PCS shall be stored longer than seven days during landfarm season without written permission from the department field office that has jurisdiction over the landfarm.
 - **120.9(4)** *PCS* application weather and landfarm season.
- a. PCS shall only be land applied to the land during non-landfarm season if the PCS must be land applied to the land as part of an emergency cleanup supervised by the department pursuant to subrule 120.6(1), or all of the following conditions exist:
 - (1) The operating area landfarm plot is free of snow.

- (2) The slope of the operating area landfarm plot is less than 3 percent.
- (3) The PCS is incorporated into the soil as soon as site conditions allow.
- b. PCS shall not be land applied to the land during precipitation.
- **120.9(5)** One application, source and type of PCS per plot. One application of a particular source and type of PCS may be applied to a landfarm plot. A landfarm may only apply a subsequent application of PCS to a previously utilized landfarm plot if such application is in compliance with the following:
- a. Multiuse landfarms. A subsequent application of a particular source and type of PCS may be applied to a previously utilized landfarm plot in a multiuse landfarm after the following requirements have been met:
 - (2) The PCS turning requirement of subrule 120.9(10) has been completed.
- (1) <u>a.</u> The plot has been tested pursuant to subparagraphs 120.6(2) "c"(1), (2), and (3), and the results demonstrate that petroleum constituent concentrations are less than 0.54 mg/kg for benzene, 42 mg/kg for toluene, 15 mg/kg for ethylbenzene, 3800 mg/kg for TEH-diesel, and 0.02 mg/kg for MTBE.
- b. Single-use landfarms. A subsequent application of a particular source and type of PCS may not be applied within 15 feet of an area used as a single-use landfarm until the single-use landfarm is closed pursuant to subrule 120.12(2).
 - ITEM 48. Amend subrule 120.9(11) as follows:
 - 120.9(11) No crops for consumption.
- a. Multiuse landfarms shall not grow crops for human or livestock consumption within 15 feet of the operating area until the landfarm is closed pursuant to subrule 120.12(1).
- b. Single-use landfarms Landfarms shall not grow crops within 15 feet of a landfarm plot that is flagged pursuant to subrule 120.9(7). Crops for human and livestock consumption may be grown at a single-use landfarm after the landfarm plot is no longer required to be flagged pursuant to subrule 120.9(7).
 - ITEM 49. Rescind subrule **120.9(12)**.
 - ITEM 50. Renumber subrule **120.9(13)** as **120.9(12)**.
 - ITEM 51. Amend renumbered paragraph 120.9(12)"b" as follows:
- b. The results of the tests in paragraph 120.12(1)"a" 120.12(2)"a" demonstrate that petroleum constituent concentrations for benzene, toluene, ethylbenzene, TEH-diesel, and MTBE are below the detection limits required by 567—Chapter 135.
 - ITEM 52. Amend subrule 120.10(1) as follows:
- **120.10(1)** Access. Emergency response and remedial action plan (ERRAP) documents shall be readily available. Multiuse landfarms shall maintain a copy of the ERRAP on site (e.g., the back of permit sign, fence post, or mailbox). Single-use landfarm Landfarm applicators shall have employees carry a copy of the ERRAP document to each site where operations are taking place.
 - ITEM 53. Amend subrule 120.11(1) as follows:
- **120.11(1)** *Reporting.* The following information shall be submitted to the department on a form provided by the department. All reporting submissions shall include the name, address, and telephone number of the landfarm and permit holder, as well as the permit number.
- a. Storage notification. Multiuse and single-use landfarms Landfarms shall submit the following information to the department and department field office with jurisdiction over the landfarm before receipt of the PCS for storage; however, at least 30 days' notification is encouraged. PCS storage information from an emergency cleanup supervised by the department pursuant to subrule 120.6(1), however, shall be reported within 7 days of the emergency cleanup.
 - (1) to (3) No change.
- b. Land application notification. Multiuse and single-use landfarms Landfarms shall submit the following information to the department and department field office with jurisdiction over the landfarm before land application; however, at least 30 days' notification is encouraged. PCS information from an emergency cleanup supervised by the department pursuant to subrule 120.6(1), however, shall be reported within 7 days of the emergency cleanup.

- (1) The date the PCS is expected to be land applied to the land. If the PCS is not applied on this date, the department shall be informed of the actual application date.
- (2) Single-use landfarms shall submit an A physical address, or parcel identification number for the landfarm location, a legible topographic map or aerial photo, a USDA soil map with key, and a map of the 100-year flood plain illustrating and labeling where the PCS is to be applied. Multiuse landfarms shall report the landfarm plot(s) to which the PCS is to be applied.
 - (3) Application rate calculations pursuant to subrule 120.9(6).
 - (4) The spill number, UST registration number, and LUST number, as applicable.
- c. PCS analysis and characterization. Information on the analysis and characterization of the PCS pursuant to rule 567—120.6(455B) shall be submitted to the department before receipt of the PCS for storage or land application; however, at least 30 days' notification is encouraged. PCS analysis and characterization information from an emergency cleanup supervised by the department pursuant to subrule 120.6(1), however, shall be reported within 60 days of the emergency cleanup.
- d. Groundwater monitoring well results. Multiuse landfarms shall annually test all groundwater monitoring wells as follows. A laboratory certified pursuant to 567—Chapter 83 for UST petroleum analyses shall test the samples. Test results for each well at a multiuse landfarm shall be submitted to the department by the first workday in January of each year.
- (1) BTEX testing. The groundwater monitoring wells shall be tested for benzene, toluene, ethylbenzene, and xylene (BTEX). The BTEX analysis shall utilize the most recent version of Method OA-1 (GCMS), "Method for Determination of Volatile Petroleum Hydrocarbons (Gasoline)," University of Iowa Hygienic Laboratory.
- (2) TEH-diesel and waste oil testing. The groundwater monitoring wells shall be tested for total extractable hydrocarbons (TEH-diesel and waste oil). The TEH-diesel and waste oil analyses shall utilize the most recent version of Method OA-2, "Extractable Petroleum Products (and Relatively Low Volatility Organic Compounds)," University of Iowa Hygienic Laboratory.
- (3) MTBE testing. The groundwater monitoring wells shall be tested for MTBE unless prior analysis of PCS accepted for landfarming, pursuant to rule 567—135.15(455B), has shown that MTBE was not present in soil or groundwater of the source. A laboratory certified pursuant to 567—Chapter 83 for UST petroleum analyses shall test the samples. The analysis shall utilize one of the following methods:
- 1. The most recent version of Method OA-1 (GCMS), "Method for Determination of Volatile Petroleum Hydrocarbons (Gasoline)," University of Iowa Hygienic Laboratory.
- 2. U.S. Environmental Protection Agency (EPA) Method 8260B, SW-846, "Test Methods for Evaluating Solid Waste," Third Edition.
 - ITEM 54. Amend subrule 120.11(2), introductory paragraph, as follows:
- **120.11(2)** Record keeping. All landfarms landfarm applicators shall maintain records of all information related to compliance with this chapter and the permit throughout the life of the landfarm and for three years after landfarm closure pursuant to rule 567—120.12(455B). This information shall be available to the department upon request. Applicable information includes, but is not limited to, the following material.
 - ITEM 55. Amend rule 567—120.12(455B) as follows:
- 567—120.12(455B) Landfarm closure. Unless otherwise required or approved by the department, landfarms shall be closed as follows. in one of the following ways:
- 120.12(1) Multiuse landfarms. Multiuse landfarms may be closed after groundwater monitoring well tests verify that down-gradient groundwater monitoring well results are within two standard deviations of the mean analyte concentrations, pursuant to paragraph 120.11(1) "d," in corresponding up-gradient monitoring wells for three consecutive years after the last application of PCS. Furthermore, prior to closure each landfarm plot shall be tested as follows. Closure is not official until verified in writing by the department.

- a. One sample from each 10,000 ft² (e.g., 100-foot × 100-foot area) of landfarm plot is analyzed pursuant to subparagraphs 120.6(2) "c"(1), (2), and (3). A minimum of one sample per landfarm plot shall be obtained. All samples shall be obtained from between the top 2 to 6 inches of soil.
- b. The results of the tests in paragraph 120.12(1)"a" demonstrate that petroleum constituent concentrations are less than 0.54 mg/kg for benzene, 42 mg/kg for toluene, 15 mg/kg for ethylbenzene, 3800 mg/kg for TEH-diesel and 0.02 mg/kg for MTBE.
 - 120.12(2) 120.12(1) Single-use landfarms. Three years after the application of PCS, or
- $\underline{120.12(2)}$ Single-use landfarms are closed three years after the application of PCS, or at \underline{At} least six months after the application of PCS when documentation has been submitted and acknowledged in writing by the department that each landfarm plot has been tested as follows.
 - a. and b. No change.
 - ITEM 56. Amend rule 567—120.13(455B,455D) as follows:
- 567—120.13(455B,455D) Financial assurance requirements for multiuse and single-use landfarms. The holder of a sanitary disposal project permit for a multiuse or single-use landfarm must obtain and submit a financial assurance instrument to the department in accordance with this rule. The financial assurance instrument shall provide monetary funds for the purpose of conducting closure activities at the operating area(s) landfarm plot(s) due to the permit holder's failure to properly close the site as required in accordance with rule 567—120.12(455B) within 30 days of permit suspension, termination, revocation, or expiration.
- **120.13(1)** *No permit without financial assurance.* The department shall not issue or renew a permit to an owner or operator of a multiuse or single-use landfarm until a financial assurance instrument has been submitted to and approved by the department.
- **120.13(2)** *Proof of compliance.* Proof of the establishment of the financial assurance instrument and compliance with this rule, including a current closure cost estimate, shall be submitted by July 1, 2008, or at the time of application for a permit for a new multiuse or single-use landfarm applicator permit. The owner or operator must provide continuous coverage for closure and submit proof of compliance, including an updated closure cost estimate, with each permit renewal thereafter until released from this requirement by the department.
- **120.13(3)** Financial assurance amounts required. The estimate submitted to the department must be certified by a professional engineer and account for at least the following factors determined by the department to be minimal necessary costs for closure pursuant to rule 567—120.12(455B):
- a. Third-party costs to conduct groundwater and soil sampling and properly clean all equipment and storage areas at the operating area(s) landfarm plot(s).
 - b. No change.
- **120.13(4)** Acceptable financial assurance instruments. The financial assurance instrument shall be established in an amount equal to the cost estimate prepared in accordance with subrule 120.13(3) and shall not be canceled, revoked, disbursed, released, or allowed to terminate without the approval of the department. Financial assurance may be provided by cash in the form of a secured trust fund or local government dedicated fund, surety bond, letter of credit, or corporate or local government guarantee as follows:
 - a. and b. No change.
- c. Surety bond. A surety bond must be written by a company authorized by the commissioner of insurance to do business in the state. The surety bond shall comply with the following:
 - (1) No change.
- (2) The bond shall be specific to a particular landfarm owner or operator for the purpose of funding closure in accordance with rule 567—120.12(455B) and removing any stockpiled PCS that may remain at the site(s) due to the owner's or operator's failure to properly close the site within 30 days of permit suspension, termination, revocation, or expiration.
 - (3) No change.
 - d. to f. No change.
 - **120.13(5)** Financial assurance cancellation and permit suspension.

- a. to c. No change.
- d. The owner or operator shall perform proper closure within 30 days of the permit suspension. For the purpose of this rule, "proper closure" means completion of all items pursuant to rule 567—120.12(455B) and subrule 120.13(3).
 - e. to g. No change.